Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1-67. (canceled)

68. (New) A method for inhibiting the expression of a target gene in a mammalian cell, the method comprising: introducing into the cell an RNA comprising a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of the target gene and which is derived from an endogenous template; and verifying inhibition of expression of the target gene.

69. (New) The method as claimed in claim 68, wherein the target gene is an endogenous gene.

70. (New) The method as claimed in claim 68, wherein the target gene is a viral gene.

71. (New) The method as claimed in claim 68, wherein the RNA is produced outside the cell.

72. (New) The method as claimed in claim 71, wherein the RNA is injected into the cell.

73. (New) The method as claimed in claim 68, wherein the RNA is produced within the cell.

74. (New) The method as claimed in claim 68, wherein the RNA is produced recombinantly.

75. (New) The method as claimed in claim 73, wherein the RNA is produced by an expression vector in the cell.

76. (New) The method as claimed in claim 68, wherein the RNA comprises a single self-complementary RNA strand.

77. (New) The method as claimed in claim 68, wherein the RNA comprises two separate complementary RNA strands.

78. (New) The method as claimed in claim 68, wherein the nucleotide sequence is substantially identical to the whole of the target gene.

79. (New) The method as claimed in claim 68, wherein the nucleotide sequence has 90% or 100% identity with at least a part of the target gene.

80. (New) The method as claimed in claim 68, wherein the target gene causes or is likely to cause disease.

81. (New) An RNA comprising a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene in a mammalian cell and which is derived from an endogenous template for use as a medicament.

82. (New) A pharmaceutical formulation comprising RNA which comprises a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene in a mammalian cell and which is derived from an endogenous template, together with a pharmaceutically acceptable carrier.

83. (New) The pharmaceutical formulation as claimed in claim 82, modified by the features of any one of claims 69 to 80.

84. (New) A kit for inhibiting expression of a target gene in a mammalian cell, the kit comprising: RNA which comprises a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene in the mammalian cell and which is derived from an endogenous template; and a vehicle that promotes introduction of the RNA to the mammalian cell.

85. (New) The kit as claimed in claim 84, modified by the features of any one of claims 69 to 80.

86. (New) A mammalian cell containing an expression construct, the construct coding for an RNA which forms a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene and which is derived from an endogenous template.

87. (New) A method for inhibiting the expression of a target gene in a mammalian cell, the method comprising: introducing into the cell an RNA comprising a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of the target gene and which is derived from an endogenous template.

88. (New) A method for inhibiting the expression of a target gene in a mammalian cell, the method comprising: introducing into the cell an RNA comprising a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of the target gene and which is derived from an endogenous template; and verifying inhibition of expression of the target gene, wherein the mammalian cell is a somatic cell.

89. (New) The method as claimed in claim 88, wherein the target gene is an endogenous gene.

90. (New) The method as claimed in claim 88, wherein the target gene is a viral gene.

91. (New) The method as claimed in claim 88, wherein the RNA is produced outside the cell.

92. (New) The method as claimed in claim 91, wherein the RNA is injected into the cell.

93. (New) The method as claimed in claim 88, wherein the RNA is produced within the cell.

94. (New) The method as claimed in claim 88, wherein the RNA is produced recombinantly.

95. (New) The method as claimed in claim 93, wherein the RNA is produced by an expression vector in the cell.

96. (New) The method as claimed in claim 88, wherein the RNA comprises a single self-complementary RNA strand.

97. (New) The method as claimed in claim 88, wherein the RNA comprises two separate complementary RNA strands.

98. (New) The method as claimed in claim 88, wherein the nucleotide sequence is substantially identical to the whole of the target gene.

99. (New) The method as claimed in claim 88, wherein the nucleotide sequence has 90% or 100% identity with at least a part of the target gene.

100. (New) The method as claimed in claim 88, wherein the target gene causes or is likely to cause disease.

101. (New) An RNA comprising a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene in a mammalian somatic cell and which is derived from an endogenous template for use as a medicament.

102. (New) A pharmaceutical formulation comprising RNA which comprises a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene in a mammalian somatic cell and which is derived from an endogenous template, together with a pharmaceutically acceptable carrier.

103. (New) The pharmaceutical formulation as claimed in claim 102, modified by the features of any one of claims 89 to 100.

104. (New) A kit for inhibiting expression of a target gene in a mammalian somatic cell, the kit comprising: RNA which comprises a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene in the mammalian somatic cell and which is derived from an endogenous template; and a vehicle that promotes introduction of the RNA to the mammalian somatic cell.

105. (New) The kit as claimed in claim 104, modified by the features of any one of claims 89 to 100.

106. (New) A mammalian cell containing an expression construct, the construct coding for an RNA which forms a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of a target gene and which is derived from an endogenous template, wherein the mammalian cell is a somatic cell.

107. (New) A method for inhibiting the expression of a target gene in a mammalian cell, the method comprising: introducing into the cell an RNA comprising a double stranded structure having a nucleotide sequence which is substantially identical to at least a part of the target gene and which is derived from an endogenous template, wherein the mammalian cell is a somatic cell.